disributions. **RESULTS:** In the base case, NA-E was found to be the most cost-effective alternative. NA-E cost 321UAH (1 USD = 5.05 UAH) compared to 930UAH for D-E, 1319UAH for transdermal N-E to prevent a single pregnancy per patient per year. Monte –Carlo sensivity analysis confirmed these findings. **CONCLUSION:** The cost-effectiveness ratio NA-E dominated all contraceptive strategies.These direct medical costs, in turn, were driven by differential compliance that favored NA-E.

PIH9

COST-EFFECTIVENESS ANALYSIS OF CONTRACEPTIVES AVAILABLE IN UNITED STATES

Trussell J[1], Lalla AM[2], Doan QV[2], Reyes E[2], Pinto L[2], Gricar JA[3]
[1]Princeton University, Princeton, NJ, USA, [2]Cerner LifeSciences, Cerner Corporation, Beverly Hills, CA, USA, [3]Independent HealthCare Consultant, New York, NY, USA

OBJECTIVE: To conduct a cost-effectiveness analysis of contraceptives available in the United States from a payer's perspective. **METHODS:** A Markov model was constructed to simulate method failure (defined as ectopic pregnancy, abortion, or full-term birth) and costs among 17 contraceptive methods over a 5-year period: vasectomy, tubal ligation, injectable, implant, copper-T IUD, LNG-20 IUS, oral contraceptives, diaphragm, male condom, female condom, spermicides, sponge, patch, NuvaRing, withdrawal, periodic abstinence and no method. In each yearly cycle, subjects transition to "continue contraception", "method failure" or "plan disenrollment". Subjects remain on the method for the model duration after method failure or adverse effect. We assumed that 60% of unintended births are mistimed and would occur two years later. Failure rate, adverse event rates, and resource utilization were derived from comprehensive literature review and supplemented with expert opinion. Unit costs were obtained from published fee schedules and drug prices. Future costs and effectiveness were discounted at 3%/year. Sensitivity analyses were performed on cost and failure rates. **RESULTS:** Any contraceptive method is superior to "no method" in terms of costs and success rate. The three least expensive methods were copper-T IUD ($645), vasectomy ($713) and LNG-20 IUS ($930). The most effective methods (≥99.6% success rate) were vasectomy, implant, tubal ligation, LNG-20 IUS and copper-T IUD. Results were sensitive to variations in cost of contraception method, cost of unintended pregnancy and plan disenrollment rates. Moreover, with a longer time horizon, methods with high initial costs (ie, copper-T IUD, vasectomy and LNG-20 IUS) and high effectiveness rates become more cost-effective. **CONCLUSION:** Copper-T IUD, vasectomy and LNG-20 IUS are among the most effective methods currently available in the US market. This analysis demonstrates that differences in efficacy, method costs, cost of unintended pregnancies and time horizon are influential factors that determine the overall value of a contraception method.

PIH10

THE COST-EFFECTIVENESS OF ROUTINE SCREENING FOR VASA PREVIA AT 18–20 WEEKS GESTATION IN ONTARIO

Cipriano LE[1], Barth WH[1], Zaric GS[2]
[1]Massachusetts General Hospital, Boston, MA, USA, [2]University of Western Ontario, London, ON, Canada

OBJECTIVE: To estimate the cost-effectiveness of screening for vasa previa at 18–20 weeks gestation. Several screening strategies were considered for singleton and twin pregnancies. **METHODS:** We constructed a decision-analytic model to estimate the incremental costs and benefits associated with screening for vasa previa at 18–20 weeks gestation. We compared the status quo of not screening to scenarios in which all singleton and twin pregnancies were screened using transvaginal color Doppler ultrasound. We also considered strategies in which only high-risk pregnancies were screened. Costs were collected primarily from the London Health Sciences Centre case costing initiative and from the OHIP Schedule of Benefits for Physicians. Other data estimates were obtained from published sources and expert opinion. Health benefits were measured in life-years (LY) gained. Costs and health benefits were estimated for a cohort of pregnancies in Ontario in 1 year. **RESULTS:** Compared to not screening, screening all twin pregnancies for vasa previa has an incremental cost effectiveness ratio (ICER) of less than $10,000 per LY gained. Among all risk factors in singleton pregnancies, velementous cord insertion is the strongest predictor of vasa previa. Identifying and screening pregnancies affected by velamentous cord insertion has an ICER of less than $10,000 per LY gained compared to not screening. Compared to screening only pregnancies identified as having a velamentous cord insertion, screening all pregnancies has an ICER of approximately $75,000 per LY-gained. Compared to screening for vasa previa in pregnancies identified as having any high risk indicator, routine screening of all pregnancies has an ICER of over $100,000 per LY gained. **CONCLUSION:** A strategy of screening all twin and all high-risk singleton pregnancies for vasa previa has a very low incremental cost effectiveness ratio and should be considered for adoption. However, routine screening of all pregnancies is not likely to be cost effective.

PIH11

IMPACT OF THE RISK SCORING MODEL ON THE COST-EFFECTIVENESS OF PALIVIZUMAB FOR RESPIRATORY SYNCYTIAL VIRUS PROPHYLAXIS IN PREMATURE INFANTS WITH A GESTATIONAL AGE OF 32–35 WEEKS IN CANADA

Lanctôt KL[1], Paes B[2], Francis PL[1], Chiu A[3], Hui C[4], Oh PI[5]
[1]Sunnybrook Health Sciences Centre, Toronto, ON, Canada, [2]McMaster University, Hamilton, ON, Canada, [3]University of Manitoba, Winnipeg, Manitoba, Canada, [4]Children's Hospital of Eastern Ontario, Ottawa, ON, Canada, [5]Toronto Rehabilitation Institute, North York, ON, Canada

OBJECTIVE: Prophylactic therapy with palivizumab, a humanized monoclonal antibody, reduces the number of respiratory syncytial virus (RSV)-related hospitalizations in preterm infants, including those in the 32 to 35 weeks gestational age (GA) subgroup. The cost-effectiveness of this therapy in Canada is unknown. To evaluate the cost-effectiveness of palivizumab as respiratory syncytial virus prophylaxis in premature infants born at 32 to 35 weeks GA, from both the payer (base-case) and societal perspectives. **METHODS:** A decision analytic model was designed to compare costs and benefits of prophylaxis in this subgroup of premature infants. Sensitivity analyses were performed to ascertain the robustness of the model by varying mortality, health utilities, discount rates and administration costs. SETTING: Canadian publicly funded health care system (base-case analysis). PARTICIPANTS: Canadian infants born at 32 to 35 weeks gestation without chronic lung disease. INTERVENTIONS: Palivizumab prophylaxis versus no prophylaxis. MAIN OUTCOME MEASURES: Expected costs and incremental cost-effectiveness ratio expressed as cost per quality-adjusted life-year (QALY) gained using $CAN 2006. **RESULTS:** The expected costs were higher for palivizumab prophylaxis as compared with no prophylaxis. The incremental cost-effectiveness ratio for the base-case scenario was $16,605 per QALY after discounting, which is considered cost-effective. Sensitivity analyses showed the model was robust through reasonable estimates of key variables. Sub-analyses that varied risk of RSV based on